

SEQUENCE LISTING

<110> Klein, Elliott S.
Chandraratna Roshantha A.

<120> Methods of Detecting Dissociated Nuclear
Hormone Receptor Ligands

<130> P-AR 4528

<160> 52

<170> FastSEQ for Windows Version 4.0

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<211> 462
<212> PRT
<213> Homo sapiens

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1 5 10 15
Asn Gly Tyr Pro Val Pro Pro Tyr Ala Phe Phe Phe Pro Pro Met Leu
20 25 30
Gly Gly Leu Ser Pro Pro Gly Ala Leu Thr Thr Leu Gln His Gln Leu
35 40 45
Pro Val Ser Gly Tyr Ser Thr Pro Ser Pro Ala Thr Ile Glu Thr Gln
50 55 60
Ser Ser Ser Glu Glu Ile Val Pro Ser Pro Pro Ser Pro Pro Pro
65 70 75 80
Leu Pro Arg Ile Tyr Lys Pro Cys Phe Val Cys Gln Asp Lys Ser Ser
85 90 95
Gly Tyr His Tyr Gly Val Ser Ala Cys Glu Gly Cys Lys Gly Phe Phe
100 105 110
Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg Asp Lys
115 120 125
Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr Cys Arg
130 135 140
Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ser Val Arg Asn
145 150 155 160
Asp Arg Asn Lys Lys Lys Glu Val Pro Lys Pro Glu Cys Ser Glu
165 170 175
Ser Tyr Thr Leu Thr Pro Glu Val Gly Glu Leu Ile Glu Lys Val Arg
180 185 190
Lys Ala His Gln Glu Thr Phe Pro Ala Leu Cys Gln Leu Gly Lys Tyr
195 200 205
Thr Thr Asn Asn Ser Ser Glu Gln Arg Val Ser Leu Asp Ile Asp Leu
210 215 220
Trp Asp Lys Phe Ser Glu Leu Ser Thr Lys Cys Ile Ile Lys Thr Val
225 230 235 240
Asp Phe Ala Lys Gln Leu Pro Gly Phe Thr Thr Leu Thr Ile Ala Asp

245	250	255
Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Ile Leu Arg		
260	265	270
Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp		
275	280	285
Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro		
290	295	300
Leu Thr Asp Leu Val Phe Ala Phe Ala Asn Gln Leu Leu Pro Leu Glu		
305	310	315
Met Asp Asp Ala Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys		
325	330	335
Gly Asp Arg Gln Asp Leu Glu Gln Pro Asp Arg Val Asp Met Leu Gln		
340	345	350
Glu Pro Leu Leu Glu Ala Leu Lys Val Tyr Val Arg Lys Arg Arg Pro		
355	360	365
Ser Arg Pro His Met Phe Pro Lys Met Leu Met Lys Ile Thr Asp Leu		
370	375	380
Arg Ser Ile Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met		
385	390	395
Glu Ile Pro Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn		
405	410	415
Ser Glu Gly Leu Asp Thr Leu Ser Gly Gln Pro Gly Gly Gly Arg		
420	425	430
Asp Gly Gly Leu Ala Pro Pro Pro Gly Ser Cys Ser Pro Ser Leu		
435	440	445
Ser Pro Ser Ser Asn Arg Ser Ser Pro Ala Thr His Ser Pro		
450	455	460

<210> 2
<211> 448
<212> PRT
<213> Homo sapiens

<400> 2

Met Phe Asp Cys Met Asp Val Leu Ser Val Ser Pro Gly Gln Ile Leu		
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20	25	30
Leu Lys Ala Cys Phe Ser Gly Leu Thr Gln Thr Glu Trp Gln His Arg		
35	40	45
His Thr Ala Gln Ser Ile Glu Thr Gln Ser Thr Ser Glu Glu Leu		
50	55	60
Val Pro Ser Pro Pro Ser Pro Leu Pro Pro Pro Arg Val Tyr Lys Pro		
65	70	75
Cys Phe Val Cys Gln Asp Lys Ser Ser Gly Tyr His Tyr Gly Val Ser		
85	90	95
Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Ile Gln Lys Asn		
100	105	110
Met Ile Tyr Thr Cys His Arg Asp Lys Asn Cys Val Ile Asn Lys Val		
115	120	125
Thr Arg Asn Arg Cys Gln Tyr Cys Arg Leu Gln Lys Cys Phe Glu Val		
130	135	140

Gly Met Ser Lys Glu Ser Val Arg Asn Asp Arg Asn Lys Lys Lys Lys
145 150 155 160
Glu Thr Ser Lys Gln Glu Cys Thr Glu Ser Tyr Glu Met Thr Ala Glu
165 170 175
Leu Asp Asp Leu Thr Glu Lys Ile Arg Lys Ala His Gln Glu Thr Phe
180 185 190
Pro Ser Leu Cys Gln Leu Ala Lys Tyr Thr Thr Asn Ser Ser Ala Asp
195 200 205
His Arg Val Arg Leu Asp Leu Gly Leu Trp Asp Lys Phe Ser Glu Leu
210 215 220
Ala Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala Lys Arg Leu Pro
225 230 235 240
Gly Phe Thr Gly Leu Thr Ile Ala Asp Gln Ile Thr Leu Leu Lys Ala
245 250 255
Ala Cys Leu Asp Ile Leu Ile Leu Arg Ile Cys Thr Arg Tyr Thr Pro
260 265 270
Glu Gln Asp Thr Met Thr Phe Ser Asp Gly Leu Thr Leu Asn Arg Thr
275 280 285
Gln Met His Asn Ala Gly Phe Gly Pro Leu Thr Asp Leu Val Phe Thr
290 295 300
Phe Ala Asn Gln Leu Leu Pro Leu Glu Met Asp Asp Thr Glu Thr Gly
305 310 315 320
Leu Leu Ser Ala Ile Cys Leu Ile Cys Gly Asp Arg Gln Asp Leu Glu
325 330 335
Glu Pro Thr Lys Val Asp Lys Leu Gln Glu Pro Leu Leu Glu Ala Leu
340 345 350
Lys Ile Tyr Ile Arg Lys Arg Arg Pro Ser Lys Pro His Met Phe Pro
355 360 365
Lys Ile Leu Met Lys Ile Thr Asp Leu Arg Ser Ile Ser Ala Lys Gly
370 375 380
Ala Glu Arg Val Ile Thr Leu Lys Met Glu Ile Pro Gly Ser Met Pro
385 390 395 400
Pro Leu Ile Gln Glu Met Met Glu Asn Ser Glu Gly His Glu Pro Leu
405 410 415
Thr Pro Ser Ser Ser Gly Asn Thr Ala Glu His Ser Pro Ser Ile Ser
420 425 430
Pro Ser Ser Val Glu Asn Ser Gly Val Ser Gln Ser Pro Leu Val Gln
435 440 445

<210> 3
<211> 454
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<213> Homo sapiens

<400> 3
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Leu Arg Gly Ser Pro Pro Phe Glu Met Leu Ser Pro Ser Phe Arg Gly
35 40 45
Leu Gly Gln Pro Asp Leu Pro Lys Glu Met Ala Ser Leu Ser Val Glu

50	55	60
Thr Gln Ser Thr Ser Ser Glu Glu Met Val Pro Ser Ser Pro Ser Pro		
65	70	75
Pro Pro Pro Pro Arg Val Tyr Lys Pro Cys Phe Val Cys Asn Asp Lys		80
85	90	95
Ser Ser Gly Tyr His Tyr Gly Val Ser Ser Cys Glu Gly Cys Lys Gly		
100	105	110
Phe Phe Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg		
115	120	125
Asp Lys Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr		
130	135	140
Cys Arg Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ala Val		
145	150	155
Arg Asn Asp Arg Asn Lys Lys Lys Glu Val Lys Glu Glu Gly Ser		160
165	170	175
Pro Asp Ser Tyr Glu Leu Ser Pro Gln Leu Glu Glu Leu Ile Thr Lys		
180	185	190
Val Ser Lys Ala His Gln Glu Thr Phe Pro Ser Leu Cys Gln Leu Gly		
195	200	205
Lys Tyr Thr Thr Asn Ser Ser Ala Asp His Arg Val Gln Leu Asp Leu		
210	215	220
Gly Leu Trp Asp Lys Phe Ser Glu Leu Ala Thr Lys Cys Ile Ile Lys		
225	230	235
Ile Val Glu Phe Ala Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile		240
245	250	255
Ala Asp Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Met		
260	265	270
Leu Arg Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe		
275	280	285
Ser Asp Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe		
290	295	300
Gly Pro Leu Thr Asp Leu Val Phe Ala Phe Ala Gly Gln Leu Leu Pro		
305	310	315
Leu Glu Met Asp Asp Thr Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu		320
325	330	335
Ile Cys Gly Asp Arg Met Asp Leu Glu Glu Pro Glu Lys Val Asp Lys		
340	345	350
Leu Gln Glu Pro Leu Leu Glu Ala Leu Arg Leu Tyr Ala Arg Arg Arg		
355	360	365
Arg Pro Ser Gln Pro Tyr Met Phe Pro Arg Met Leu Met Lys Ile Thr		
370	375	380
Asp Leu Arg Gly Ile Ser Thr Lys Gly Ala Glu Arg Ala Ile Thr Leu		
385	390	395
Lys Met Glu Ile Pro Gly Pro Met Pro Pro Leu Ile Arg Glu Met Leu		400
405	410	415
Glu Asn Pro Glu Met Phe Glu Asp Asp Ser Ser Gln Pro Gly Pro His		
420	425	430
Pro Asn Ala Ser Ser Glu Asp Glu Val Pro Gly Gly Gln Gly Lys Gly		
435	440	445
Gly Leu Lys Ser Pro Ala		
450		

<210> 4
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<212> PRT
<213> Artificial Sequence

<220>
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<221> VARIANT
<222> (1) ... (9)
<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1) ... (9)
<223> Xaa = Any Amino Acid

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Leu Xaa Xaa Ile Ile Xaa Xaa Xaa Leu
1 5

<210> 5
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 5
Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 6
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 6
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 7
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 7

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

<210> 8

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 8

Asp Thr Tyr Arg Tyr Ile
1 5

<210> 9

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 9

His His His His His
1 5

<210> 10

<211> 17

<212> DNA

<213> Artificial Sequence

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<223> synthetic nucleotide

<221> misc_feature

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<223> n = A,T,C or G

<400> 10

ggttcannnn nagttca

17

<210> 11

<211> 14

<212> DNA

<213> Artificial Sequence

<220>
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<221> misc_feature
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<223> n = A,T,C or G

<400> 11
aggtcannag gtca

<210> 12
<211> 35
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<213> Artificial Sequence

<220>
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<221> misc_feature
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<400> 12
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14

35

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<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic nucleotide

<221> misc_feature
<222> (1)...(13)
<223> n = A,T,C or G

<400> 13
agggcanagg tca

13

<210> 14
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic nucleotide

<221> misc_feature
<222> (1)...(13)
<223> n = A,T,C or G

<400> 14

cgccaanagg tca	13
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<211> 15	
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<220>	
<223> synthetic nucleotide	
<221> misc_feature	
<222> (1)...(15)	
<223> n = A,T,C or G	
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<222> (1)...(15)	
<223> n = A,T,C or G	
<400> 16	
agaacannnt gttct	15
<210> 17	
<211> 27	
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agctttcagg tcaccaggag gtcagaa	27
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<211> 57	
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20 25 30
Asp Cys Leu Ile Asp Lys Arg Gln Arg Asn Arg Cys Gln Tyr Cys Arg
35 40 45
Tyr Gln Lys Cys Leu Ala Met Gly Met
50 55

<210> 19
<211> 57
<212> PRT
<213> T. cystophoro

<400> 19
Val Lys His Tyr Gly Val Phe Ala Cys Glu Gln Cys Lys Gly Phe Phe
1 5 10 15
Lys Arg Ser Val Arg Asn Asn Arg Lys Tyr Ser Cys Leu Gly Lys Arg
20 25 30
His Cys Asp Thr Asp Lys Lys Ser Arg Asn Arg Cys Gln Tyr Cys Arg
35 40 45
Phe Gln Lys Cys Val Gln Val Gly Met
50 55

<210> 20
<211> 83
<212> PRT
<213> Homo sapiens

<400> 20
Gly Tyr His Tyr Arg Cys Ile Thr Cys Glu Gln Cys Lys Gln Phe Phe
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Arg Arg Thr Thr Gln Lys Asn Leu His Pro Ser Tyr Ser Cys Lys Tyr
20 25 30
Glu Gly Lys Cys Val Ile Asp Lys Val Thr Arg Asn Gln Cys Gln Glu
35 40 45
Cys Arg Phe Lys Lys Cys Ile Tyr Val Gly Met Ala Thr Asp Leu Val
50 55 60
Leu Asp Gln Ser Lys Arg Leu Ala Lys Arg Lys Leu Ile Glu Glu Asn
65 70 75 80
Arg Glu Lys

<210> 21
<211> 61
<212> PRT
<213> Homo sapiens

<400> 21

Gly Tyr His Tyr Gly Val Trp Ser Cys Glu Gln Cys Lys Ala Phe Phe
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Lys Arg Ser Ile Gln Gly His Asn Asp Tyr Met Cys Pro Ala Thr Asn
20 25 30
Gln Cys Thr Ile Asp Lys Asn Arg Arg Lys Ser Cys Gln Ala Cys Arg
35 40 45
Leu Arg Lys Cys Tyr Glu Val Gly Met Met Lys Gly Gly
50 55 60

<210> 22
<211> 57
<212> PRT
<213> Rattus sp.

<400> 22
Gly Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe
1 5 10 15
Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn
20 25 30
Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg
35 40 45
Tyr Arg Lys Cys Leu Gln Ala Gly Met
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<210> 23
<211> 20
<212> PRT
<213> Homo sapiens

<400> 23
Trp Ala Lys Arg Ile Pro His Phe Ser Glu Leu Pro Leu Asp Asp Gln
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Val Ile Leu Leu
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<210> 24
<211> 20
<212> PRT
<213> T. cystophora

<400> 24
Trp Ala Lys Arg Leu Pro His Phe Arg Asp Leu Ser Ile Ala Asp Gln
1 5 10 15
Val Val Leu Leu
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<210> 25
<211> 20
<212> PRT

<213> Homo sapiens

<400> 25

Phe Ala Lys Lys Leu Pro Met Phe Ser Glu Leu Pro Cys Glu Asp Gln
1 5 10 15
Ile Ile Leu Leu
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<210> 26

<211> 20

<212> PRT

<213> Homo sapiens

<400> 26

Phe Ala Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile Ala Asp Gln
1 5 10 15
Ile Thr Leu Leu
20

<210> 27

<211> 20

<212> PRT

<213> Homo sapiens

<400> 27

Tyr Ala Lys Ser Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln
1 5 10 15
Val Thr Leu Leu
20

<210> 28

<211> 20

<212> PRT

<213> Homo sapiens

<400> 28

Phe Ala Lys Gln Leu Pro Gly Phe Leu Gln Leu Ser Arg Glu Asp Gln
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Ile Ala Leu Leu
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<210> 29

<211> 20

<212> PRT

<213> Homo sapiens

<400> 29

Phe Ala Lys Met Ile Pro Gly Phe Arg Asp Leu Thr Ser Glu Asp Gln
1 5 10 15

Ile Val Leu Leu
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<210> 30
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<212> PRT
<213> Homo sapiens

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Trp Ala Lys Arg Val Pro Gly Phe Val Asp Leu Thr Leu His Asp Gln
1 5 10 15
Val His Leu Leu
20

<210> 31
<211> 20
<212> PRT
<213> Homo sapiens

<400> 31
Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln
1 5 10 15
Met Thr Leu Leu
20

<210> 32
<211> 20
<212> PRT
<213> Homo sapiens

<400> 32
Trp Ser Lys Ser Leu Pro Gly Phe Arg Asn Leu His Ile Asp Asp Gln
1 5 10 15
Ile Thr Leu Ile
20

<210> 33
<211> 9
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<213> Homo sapiens

<400> 33
Leu Leu Leu Arg Leu Pro Ala Leu Arg
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<210> 34
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<213> T. cystophora

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Val Ile Leu Arg Ile Pro Ala Leu Arg
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<211> 9

<212> PRT

<213> Homo sapiens

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Leu Leu Met Lys Val Thr Asp Leu Arg
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<210> 36

<211> 9

<212> PRT

<213> Homo sapiens

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Met Leu Met Lys Ile Thr Asp Leu Arg
1 5

<210> 37

<211> 9

<212> PRT

<213> Homo sapiens

<400> 37

Leu Leu Gln Lys Met Thr Asp Leu Arg
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<210> 38

<211> 9

<212> PRT

<213> Homo sapiens

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Met Leu Met Lys Leu Val Ser Leu Arg
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<210> 39

<211> 9

<212> PRT

<213> Homo sapiens

<400> 39

Met Ile Gln Lys Leu Ala Asp Leu Arg
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<210> 40
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<213> Homo sapiens

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Leu Leu Leu Ile Leu Ser His Ile Arg
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Leu Thr Lys Leu Leu Asp Ser Met His
1 5

<210> 42
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Leu Thr Lys Leu Leu Asp Asn Leu His
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<212> PRT
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<400> 43
Phe Leu Met Glu Met Leu
1 5

<210> 44
<211> 6
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<213> T. cystophora

<400> 44
Phe Leu Leu Asp Met Leu
1 5

<210> 45
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<400> 45
Leu Phe Leu Glu Val Phe
1 5

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<400> 46
Leu Ile Arg Glu Met Leu
1 5

<210> 47
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<400> 47
Leu Leu Gln Glu Ile Tyr
1 5

<210> 48
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<400> 48
Leu Leu Ser Glu Ile Trp
1 5

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<400> 49
Leu Val Leu Glu Val Phe
1 5

<210> 50
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<213> Homo sapiens

<400> 50

Leu Leu Leu Glu Met Leu
1 5

<210> 51

<211> 6

<212> PRT

<213> Homo sapiens

<400> 51

Met Leu Ala Glu Ile Ile
1 5

<210> 52

<211> 6

<212> PRT

<213> Homo sapiens

<400> 52

Met Val Ser Glu Val Ile
1 5